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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,036	04/12/2005	Karsten Eulenberg	2923-696	7034
6449 7590 01/12/2007 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			EXAMINER SWOPE, SHERIDAN	
			ART UNIT 1652	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			NOTIFICATION DATE	
31 DAYS			01/12/2007	
			DELIVERY MODE ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 31 DAYS from 01/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No. 10/531,036	Applicant(s) EULENBERG ET AL.	
	Examiner Sheridan L. Swope	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-35 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claims 1-35 are pending.

Election/Restrictions

Restriction is required under 35 U.S.C. 121.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, Claims 1, 11-15, in part, and Claims 2-7, 10, drawn to a nucleic acid molecule.

Group II, Claims 1, 11-15, in part, and Claim 8 and 9, drawn to a protein molecule.

Group III, Claim 1, in part, drawn to a modulator of a nucleic acid molecule.

Group IV, Claim 1, in part, drawn to a modulator of a protein molecule.

Group V, Claim 16, drawn to a method of making a medicament.

Group VI, Claims 17 and 22, drawn to a method of identifying a binding partner.

Group VII, Claims 20 and 21, in part, and Claims 18 and 19, drawn to a transgenic animal.

Group VIII, Claims 20 and 21, in part, drawn to a recombinant host cell.

Group IX, Claims 23, drawn to a method for identifying modulators of binding.

Group X, Claims 24, drawn to a method for identifying modulators of activity.

Group XI, Claims 25-31, 34, and 35, drawn to a method for making a pharmaceutical composition.

Group XII, Claims 32, drawn to a method for making a transgenic animal.

Group XIII, Claims 33, drawn to a kit.

For each of Invention I-XIII above, restriction to one or more of the following is also required under 35 USC 121. Therefore, election is required of one of Inventions I-XIII and one or more of Inventions (A)-(HH), as indicated.

Art Unit: 1652

If Invention I or V, VI is elected, elect one of:

- (A.) Encoding one of the proteins set forth in Table I

If Invention XI is elected, elect one of:

- (B.) Binding partner
- (C.) Protein
- (D.) DNA
- (E.) A modulator of binding

If Invention II, III, IV, V, or any of VII-XIII is elected, elect one of:

- (F.) guf
- (G.) CG3811
- (H.) CG30346
- (I.) rdgB
- (J.) Mekk1
- (K.) Ady43A
- (L.) CG14816
- (M.) Tws
- (N.) PP2A-B

If any of Inventions I-XI is elected, elect one of:

- (O.) Detection of Metabolic syndrome
- (P.) Detection of Obesity
- (Q.) Detection of Diabetes
- (R.) Detection of Eating disorder
- (S.) Detection of Cachexia
- (T.) Detection of Heart disease
- (U.) Detection of Dyslipidemia
- (V.) Detection of Osteoarthritis
- (W.) Detection of Gallstone
- (X.) Detection of Liver fibrosis
- (Y.) Treatment of Metabolic syndrome
- (Z.) Treatment of Obesity
- (AA.) Treatment of Diabetes
- (BB.) Treatment of Eating disorder
- (CC.) Treatment of Cachexia
- (DD.) Treatment of Heart disease
- (EE.) Treatment of Dyslipidemia
- (FF.) Treatment of Osteoarthritis
- (GG.) Treatment of Gallstone
- (HH.) Treatment of Liver fibrosis

The inventions listed as Groups I-XIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special

Art Unit: 1652

technical feature for the following reasons. The technical feature linking Groups I-XIII appears to be that they all relate to proteins involved in the regulation of energy homeostasis. However, proteins involved in the regulation of energy homeostasis were known in the art. For example, Christerson et al, 1999 al teach a MEKK1 fusion protein, which anticipates Claim 9. Therefore Groups I-XIII share no special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art. Furthermore, the products of Groups I-IV, VII, VIII, and XIII do not share a special common structural and functional feature while, the methods of Groups V, VI, and IX-XII do not use the same reagents or produce the same results. In addition, the methods of Groups V, VI, and IX-XII do not comprise all of the methods for making or using the products of Groups I-IV, VII, VIII, and XIII. Accordingly, Groups I-XIII are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept.

Searching more than one of Groups I-XIII would represent a burden on the Office for the following reasons. Because the products of Groups I-IV, VII, VIII, and XIII do not share a special structural and functional feature, a search for any one said product would not encompass a search for any other said products. Thus, a search for more than one of the products of Groups I-IV, VII, VIII, and XIII would be a burden on the Office. A search for any one of the methods of Groups V, VI, and IX-XII would not encompass a search for any other said methods because the methods do not share a special technical feature of steps and products used, or results produced. Thus, the search for more than one of Groups V, VI, and IX-XII would be a burden on the Office. A search of any one of the products of Groups I-IV, VII, VIII, and XIII would not encompass a search of any of the methods of Groups V, VI, and IX-XII, or vice versa, because said methods are not the only methods of making or using said products. Thus, a search of any one of the products of Groups I-IV, VII, VIII, and XIII with any of the methods of Groups V, VI, and IX-XII would be a burden on the Office.

These inventions lack Unity of Invention for the reasons given above. Furthermore, each invention has acquired a separate status in the art due to their recognized divergent subject matter and, thus, searching more than one invention would be a burden on the Office. Therefore, restriction for examination purposes, as indicated, is proper.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the Official Gazette notice dated March 26, 1996 (1184 O.G. 86; see also M.P.E.P. ' 821.04, *In re Ochiai*, and *In re Brouwer*). Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right, if the amendment is presented prior to final rejection or allowance, whichever is earlier. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. To be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

Art Unit: 1652

currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Final Comments

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

To insure that each document is properly filed in the electronic file wrapper, it is requested that each of amendments to the specification, amendments to the claims, Applicants' remarks, requests for extension of time, and any other distinct papers be submitted on separate pages.

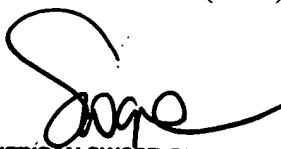
It is also requested that Applicants identify support, within the original application, for any amendments to the claims and specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan L. Swope whose telephone number is 571-272-0943. The examiner can normally be reached on M-F; 9:30-7 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheridan Lee Swope, Ph.D.
Art Unit 1652



SHERIDAN SWOPE, PH.D.
PRIMARY EXAMINER